



## Supplemental Reissue Application Declaration by the Inventor

Docket No.

802-04RE

I hereby declare that:

Each inventor's residence, mailing address and citizenship are stated below next to his/her name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is described and claimed in patent number **5,654,413**, granted **5 August 1997** and for which a reissue patent is sought on the invention entitled **COMPOSITIONS FOR SORTING POLYNUCLEOTIDES** the specification of which

☐ is attached hereto.

☒ was filed on **2 August 1999** as reissue application number **09/366,081**, and was amended on **2 August 1999**, **17 May 2000**, **4 January 2001**, **10 February 2001**, **October 7, 2004**, and herewith.

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I verily believe the original patent to be wholly or partly inoperative or invalid, for the reasons described below. (Check all boxes that apply)

☐ by reason of a defective specification or drawing.

☒ by reason of the patentee claiming more or less than he had the right to claim in the patent.

☐ by reason of other errors.

**At least one error upon which reissue is based is described below. If the reissue is a broadening reissue, such must be stated with an explanation as to the nature of the broadening.**

The reissue applied for is a broadening reissue. The nature of the broadening lies in the scope of polynucleotides recited in new independent claim 5 relative to originally issued independent claim 1.

The patent specification discloses inventive subject matter directed to populations of thousands of polynucleotides attached to separate supports or regions, such that each support or region has only a single kind of polynucleotide attached. See, for example, column 14, lines 15-19:

An important aspect of the invention is the sorting of populations of identical polynucleotides, e.g. from a cDNA library, and their attachment to microparticles or separate regions of a solid phase support such that each microparticle or region has only a single kind of polynucleotide.

and column 16, lines 50-53:

Partial sequence information is obtained simultaneously from a large sample, e.g. ten to a hundred thousand, of cDNAs attached to separate microparticles as described in the above method.

The nature of the error upon which reissue is based lies in the fact that the issued independent claim (claim 1) does not encompass the full scope of the inventive subject matter. Claim 1 as issued is limited to specific types of attached polynucleotides. Specifically, claim 1 recites attached molecules which are "oligonucleotide tag complements comprising a plurality of subunits, each subunit consisting of an oligonucleotide having a length from three to six nucleotides and each subunit being selected from a minimally cross-hybridizing set, wherein a subunit of the set and a component of any other subunit of the set would have at least two mismatches". While claim 1 embodies one aspect of the invention, it does not encompass the full scope of the inventive subject matter referred to above.

Accordingly, new claim 5 recites:

5. A composition of matter comprising a plurality of from ten thousand to a hundred thousand different polynucleotides, said composition including a mixture of microparticles,  
wherein each microparticle has a population of identical polynucleotides of the plurality attached thereto,  
and wherein substantially all different polynucleotides in the plurality are attached to different microparticles.

SUPPLEMENTAL REISSUE APPLICATION DECLARATION BY THE INVENTOR (page 3)				Docket No. (optional) <b>802-04RE</b>	
<p>Every error in the patent which was corrected in the present reissue application, and which is not covered by the prior oath(s) and/or declaration(s) submitted in this application, arose without any deceptive intention on the part of the applicant.</p> <p>Note: To appoint a power of attorney, use form PTO/SB/81.</p> <p>Correspondence Address: Direct all communications about the application to:  <input checked="" type="checkbox"/> <b>The address associated with Customer No. 22918</b>  OR  <input type="checkbox"/> <b>Firm or Individual Name</b></p>					
Address					
City		State		Zip	
Country					
Telephone				Fax	
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine and imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this declaration is directed.</p>					
<p>Full name of sole or first inventor (given name, family name)</p> <p style="text-align: center;"><b>Sydney Brenner</b></p>					
<p>Inventor's signature <i>Sydney Brenner</i></p>				<p>Date <b>14 Sep 2005</b></p>	
<p>Residence La Jolla, California, United States of America</p>			<p>Citizenship United Kingdom</p>		
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<p>Full name of second joint inventor (given name, family name)</p>					
<p>Inventor's signature</p>				<p>Date</p>	
<p>Residence</p>			<p>Citizenship</p>		
<p>Mailing Address</p>					
<p><input type="checkbox"/> Additional joint inventors or legal representative(s) are named on separately numbered sheets forms PTO/SB/02A or U2LR attached hereto.</p>					